REMARKS

I. Status of Claims

In the office action dated November 20, 2002, the Examiner rejected claims 1-29 under 35 U.S.C. §102(e) as unpatentable over the prior art.

Having amended claims 1, 4, 6, 8-9, 11, 15-17 and 19-29 and added claims 30-55, claims 1-55 are pending in the present application. This Amendment is being made to clarify the existing claims, not to redirect claims to either new subject matter or to limit them in view of the art which is not directed to methods as claimed in the present application.

II. Art Rejection

The Examiner rejected claims 1-29 under 35 U.S.C. §102(e) as unpatentable over U.S.P.N. 5,490,097 issued to Swenson et al. (the "Swenson patent"). This rejection is respectfully traversed.

With respect to amended claim 1, it explicitly requires an act of "instantiating project models as instances of a work process model comprised of interdependent decisions, to which said project models conform". This feature requires the project models to conform to the work process models. The Swenson patent does not describe this feature, among other features recited in amended claim 1. In the portion cited by the Examiner (Col. 2), the Swenson patent describes that its "plans and sub-plans may be created or edited as the plan or sub-plan is being executed." (Col. 2, lines 31-32). This means the plans and sub-plans as described in the Swenson patent do not subscribe to any conformance. Similar features are also called for in independent claims 12 and 14. Hence, claims 1, 12 and 14 are patentably distinguishable from the Swenson patent.

With respect to claim 2, it recites the feature of "optionally generating additional subclasses or instances of said decision and data classes." This feature, in combination with other claimed features, is not described in the Swenson patent. The Examiner cited Col. 13 as describing this feature. However, a more relevant portion would be Col. 11, lines 42-56, in which the Swenson patent describes a class called "VPLActiveAgent" inheriting characteristics of a class called "VPLAgent". This clearly illustrates that the Swenson patent does not describe

the feature of "optionally generating additional subclasses or instances of said decision and data classes." Hence, claim 2 is patentably distinguishable from the Swenson patent.

With respect to claim 5, it requires the acts of "utilizing messaging between said nodes and arcs and collections of said arcs," and "determining the membership of said collections by at least one of their entry nodes and exit nodes." These features are not described in the Swenson patent. The Examiner cited Fig. 2 of the Swenson patent as illustrating these features. However, the cited portion, or other parts, of the Swenson patent does not describe the act of "determining the membership of said collections by at least one of their entry nodes and exit nodes" as required in claim 5. Hence, claim 5 is patentably distinguishable from the Swenson patent.

With respect to amended claim 6, it requires the act of "providing a network whose nodes are abstract decision situations". This feature, in combination with other claimed features, is not described in the Swenson patent. As noted above, the Swenson patent describes a class called "VPLActiveAgent" inheriting characteristics of a class called "VPLAgent" (Col. 11, lines 42-56). This clearly illustrates that the Swenson patent does not describe the feature of "providing a network whose nodes are abstract decision situations". Similar features are also required in independent claims 15 and 17. Hence, claims 6, 15, and 17 are patentably distinguishable from the Swenson patent.

With respect to claim 12, it requires the act of "modeling processes using an extensible, object-oriented framework", among other features. The combination of the features as recited in claim 12 is not described in the Swenson patent. The Examiner cited Cols. 7-13 as describing the recited features. However, the relevant portion of the Swenson patent (Col. 11, lines 42-56) teaches away from the extensibility feature and other recited features. Similar features are also required in independent claim 21. Hence, claims 12 and 21 are patentably distinguishable from the Swenson patent.

With respect to claim 13, it requires the acts of "initializing all directed arcs and arc collections with an inactive state," "activating an entry collection of directed arcs which share a common entry node upon completion of the entry node's function," and "activating all members of said entry collection upon activation of said entry collection". It also requires the acts of "activating an exit collection of directed arcs which share a common exit node upon activation of any member of said exit collection," and "testing, upon activation of said exit collection, other

members of said exit collection for said member's active/inactive state and if any member of said exit collection is inactive, then stop testing and return said exit collection to its inactive state, and otherwise, if all members have tested active, activate their common exit node." These features are not described in the Swenson patent. In particular, the Swenson patent does not describe, among other features, the collection of arcs, activating an entry collection and exit collection as required by claim 13. The Examiner cited Col. 5 line 47- Col. 6, line 29 as describing these features. However, the cited portion only describes arcs with expectations and obligations. There is no description of the features mentioned above. Similar features are also recited in independent claim 16. Hence, claims 13 and 16 are patentably distinguishable from the Swenson patent.

With respect to claim 30, it calls for the acts of "constructing a computer-based process model for each of said one or more work processes, wherein each said process model includes at least two instances of a first network", "requiring that each of said at least two instances of said first network be comprised of three or more nodes", and "requiring that a first node of said three or more nodes model an activity of one of said one or more work processes". It also calls for the acts of "requiring that a second node of said three or more nodes model behaviors of a first role of a first participant in said activity", "requiring that a third node of said three or more nodes model behaviors of a second role of a second participant in said activity" and "using each of said computer-based process models to support at least one of execution, control and improvement of said one or more work processes." This combination of acts is not described in the cited prior art.

With respect to claim 34, it recites the acts of "constructing a computer-based process model of each of said one or more work processes", "requiring that each of said process models includes one or more models of decision situations in one of said one or more work processes, wherein each of said decision situations requires a choice to be made", and "requiring that each of said process models model participation of one or more persons in said each of said decision situations, said participation being modeled as at least two decision roles". It also recites the acts of "requiring that each of said at least two decision roles be associated with said each of said decision situations", "requiring that said each of said at least two decision roles have defined behaviors", and "requiring that said defined behaviors of said each of said at least two decision

roles be differentiated from said defined behaviors of every other one of said at least two decision roles". In addition, it recites the acts of "requiring that said defined behaviors be invariant with respect to all of said decision situations", and "using each of said computer-based process models to support at least one of execution, control and improvement of said one or more work processes." This combination of acts is not described in the cited prior art.

With respect to claim 46, it requires the acts of "constructing a computer-based process model of each of said one or more work processes, wherein each said process model includes a network with a concrete object class at each node of said network", "providing a customizable object class encapsulating common attributes and methods required to model a work element of any one of said one or more work processes", and "generating said concrete object class at each said node of each said process model by customizing said customizable object class". It also requires the acts of "generating one or more project models from each said computer-based process model, wherein each of said one or more project models includes a network with an object instance of a concrete object class at each node", "requiring that each said object instance at the node of any of said one or more project models be an instance of said concrete object class at a corresponding node of said process model from which said project model has been generated", and "using said process model and said one or more project models in support of at least one of execution, control and improvement of said one or more work processes." This combination of acts is not described in the cited prior art.

Each dependent claim is patentably distinguishable from the cited prior art because they are depended from the independent claims that contain patentable features. In addition, each dependent claim also contains its own patentable features. For instance, claim 8 includes features that are not described in the Swenson patent as indicated by the Examiner in the Summary of Invention dated February 21, 2003.

III. Conclusion

All pending claims are patentably distinguishable from the prior art, and they are in the form to be allowed. Therefore, a notice to allow all pending claims is earnestly solicited.

AUTHORIZATION

The Commissioner is hereby authorized to charge any additional fees which may be required for this Amendment, or credit any overpayment to deposit account no. 08-0219. In the event that an extension of time is required, or which may be required in addition to that requested in a petition for an extension of time, the Commissioner is requested to grant a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to deposit account no. 08-0219.

Respectfully submitted,
HALE AND DORR LLP

Anthony H. Kahng
Registration No. 42,704

1455 Pennsylvania Avenue, N.W.
Washington, DC 20004-1008
(202) 942-8477
(202) 942-8484 facsimile
AHK:ldc

Date: _May 20, 2003_

APPENDIX

1.   (Amended) A <u>computer implemented</u> method for managing work processes comprising:

instantiating project models as instances of a work process model comprised of interdependent decisions, to which said project models conform,

<u>providing</u>~~rendering~~ said process models as elements of a computer-based system in support of the work process, and

<u>providing</u>~~rendering~~ said project models as elements of a computer-based system in support of the work process.

2.   (Previously Amended) A computer implemented method for modeling work processes comprising:

instantiating a plurality of objects by abstract or concrete classes, and including at least a decision class and a data class,

relating each decision object to one or more data objects which it produces,

requiring, for at least one decision object, at least one data object as a prerequisite to its activation or completion thereby establishing an interdependence between the decision object requiring said data and the decision object providing said data, and

optionally generating additional subclasses or instances of said decision and data classes.

3.   (Previously Amended) The method of claim 2 further comprising relating an arc or link class linking a first decision with a second decision.

4.   (Amended) The method of claim 2 further comprising:

~~generating~~ <u>providing</u> a decision role class specialized into at least two subclasses, each with differing behaviors, and

defining for each decision role class ~~the~~ communication requirements among ~~the~~ incumbents of roles participating in a decision, ~~the~~ <u>and</u> rights of each such <u>specialized</u> role class incumbents with respect to ~~(a) entering data elements in a database, (b) modifying elements in a database and/or (c) reading elements from a database~~ <u>said incumbents participation in a decision.</u>

5.   (Previously Amended) A computer implemented method for traversing networks including nodes and directed arcs comprising

utilizing messaging between said nodes and arcs and collections of said arcs, and

determining the membership of said collections by at least one of their entry nodes and exit nodes.

6.   (Amended) A computer implemented method of modeling and managing decision-making work processes among a plurality of participants comprising:

providing using a network whose nodes are abstract decision situations, and

providing arcs directed by decisions based on logical precedence.

7.   (Previously Amended) The method of claim 6 further comprising requiring nodes to support participation of multiple persons in differentiated roles.

8.   (Amended) The method of claim 7, further comprising

requiring that incumbents of exactly one differentiated role make a choice modeled by an said abstract decision situation, and

requiring that the incumbents of a second differentiated role have notice, elapsed time and access to the incumbents of the first role prior to the incumbents of said first role having made said choice,

requiring that the incumbents of a third differentiated role have the an opportunity to inspect the results of the choice made by the incumbents of the first role after said choice, and to accept or reject said results, with or without reference to established criteria, and

requiring that the incumbents of a fourth differentiated role have timely notice of the results of the choice made by the incumbents of the first role after said choice.

9.   (Amended) The method of claim 8, further comprising

requiring that the incumbents of a fifth differentiated role have the an opportunity to inspect the results of the choice made by the incumbents of the first role after said choice, and to

accept or reject said results according to its conformance or non-conformance to established criteria for said results.

10.   (Previously Added) The method of claim 1, further comprising

using said process models to instantiate project models, and

using said process and project models to manage, direct, and control the work of the process.

11.   (Amended) The method of claim 2 further comprising

providing a rule class as a subclass of the data class, and

at least one of:

(A) providing that instances of said rule class may be specified by a concrete decision class for use to completely determine the result of instances of said decision class by choosing the value of its associated decision's data object, and/or

(B) contingently determine at least one of (i) the associated decision object's requirement for some other specific data object, (ii) the associated decision object's association with a specific role object, (iii) the incumbent of a specific role object associated with said decision object, and/or (iv) the use of a different rule object associated with said decision object.

12.   (Previously Amended) A computer implemented method for managing work processes comprising

instantiating project models as instances of a decision process model comprised of interdependent decisions, to which said project models conform,

modeling processes using an extensible, object-oriented framework, and

mapping plural participants in the process using objects representing abstract and concrete classes as elements of said framework.

13.   (Previously Amended) A computer implemented decision-making method for traversing work process models including nodes and directed arcs connecting said nodes comprising

initializing all directed arcs and arc collections with an inactive state,

activating an entry collection of directed arcs which share a common entry node upon completion of the entry node's function,

activating all members of said entry collection upon activation of said entry collection,

activating an exit collection of directed arcs which share a common exit node upon activation of any member of said exit collection, and

testing, upon activation of said exit collection, other members of said exit collection for said member's active/inactive state and if any member of said exit collection is inactive, then stop testing and return said exit collection to its inactive state, and otherwise, if all members have tested active, activate their common exit node.

14.   (Previously Added) A method for managing work processes comprising

using an object-oriented application framework to build and configure decision process models comprised of interdependent decisions,

rendering said process models as elements of a computer-based system in support of the work process,

instantiating project models as instances of said process models, and

rendering said project models as elements of a computer-based system in support of the work process.

15.   (Amended) The method of claim 14 further comprising

rendering said process models as directed graphs, whose nodes are ~~abstract~~ concrete classes modeling decisions, and whose directed arcs or edges model dependencies between the nodal classes, and

rendering said project models as a partition of the graph of the instantiating process, where such partition is defined by a specified node from the process graph and all and only those other nodes that are dependent on said specified node.

16.   (Amended) A computer implemented method for traversing work process network models which are composed of nodal objects and directed arc objects connecting said nodal objects comprising:

<u>requiring that each of said nodal objects, each of said directed arc objects and each</u> <u>collection of said directed arc objects have a state,</u>

setting the state of every said directed arc object based upon the state of the nodal object at the initial or entry node of said directed arc object,

testing the state of every directed arc object in a collection of directed arc objects, when any directed arc object in said collection changes state, where the members of said collection are all and only those directed arc objects which have the same terminal or exit node, and

setting the state of the nodal object at the terminal or exit node of a collection of said directed arc objects based on the collective states of all members of the collection, where the members of said collection are all and only those directed arc objects which have the same terminal or exit node.

17.   (Amended) A computer implemented method of modeling and managing work processes comprising

using a network or graph whose nodes are abstract decision situations representing choices to be made, which choices are modeled by concrete decision classes and by instances of those classes, and

providing arc objects directed in each instance by the an ordered pair of concrete decision classes associated with each arc object, where the an entry or initial member of said ordered pair produces the a data result required by the an exit or terminal member of said ordered pair.

18.   (Previously Added) The method of claim 17 further comprising requiring each concrete decision class to support participation of multiple persons in differentiated roles.

19.   (Amended) The method of claim 18, further comprising

requiring that incumbents of one differentiated role associated with a concrete decision class, make the choice modeled by said concrete decision class, and

requiring that the incumbents of a second differentiated role associated with a said concrete decision class, have notice, elapsed time and access to the incumbents of the first role prior to the incumbent of said first role having made said choice,

requiring that ~~the~~ incumbents of a third differentiated role associated with ~~a~~ said concrete decision class, have opportunity to inspect the results of the choice made by the incumbents of the first role after said choice, and to accept or reject said results without or without reference to established criteria, and

requiring that ~~the~~ incumbents of a fourth role associated with ~~a~~ said concrete decision class, have timely notice of the results of the choice made by the incumbents of the first role after said choice has been made.

20.   (Amended) The method of claim 19, further comprising requiring that ~~the~~ incumbents of a fifth differentiated role associated with ~~a~~ said concrete decision class, have the opportunity to inspect the results of the choice made by the incumbents of the first role after said choice, and to accept or reject said results, but only according to its conformance or non-conformance to established criteria.

21.   (Amended) An object-oriented application framework for building work process models comprising

(a) an abstract, extensible decision class which encapsulates ~~the~~ common attributes and methods needed to model a decision or choice to be made, and

an abstract, extensible data class which encapsulates the common attributes and methods needed to model ~~the~~ a data result produced by the decision ~~which is modeled by the abstract decision class~~, or alternatively,

(b) a single abstract, extensible class which combines the attributes and methods of said abstract decision and data classes.

22.   (Amended) The framework of claim 21 further comprising a concrete directed arc class, which encapsulates the attributes and methods needed to model the dependency relationship between concrete decision classes, or instances of those classes, at the nodes of the directed arc instances, where such dependency arises from the requirement by one decision, the terminal or exit decision, for data produced by another decision, the initial or entry decision.

23.   (Amended) The framework of claim 22 further comprising an abstract decision role class which encapsulates ~~the~~ common attributes and methods needed to model ~~the~~ participation of people in a decision modeled by a concrete decision class.

24.   (Amended) The framework of claim 23 further comprising a concrete decision manager class as one specialization of the decision role class, where the role modeled by said decision manager class has a~~the~~ right to make ~~the~~ a decision or choice modeled by the associated concrete decision class.

25.   (Amended) The framework of claim 24 further comprising a concrete approver class as an additional specialization of the decision role class, where the role modeled by said approver class has a~~the~~ right to veto said decision or choice.

26.   (Amended) The framework of claim 25 further comprising a concrete consultee class as an additional specialization of the decision role class, where the role modeled by said consultee class has a~~the~~ right to an opportunity to influence the decision or choice before said choice is made, but not the opportunity to veto said decision or choice.

27.   (Amended) The framework of claim 26 further comprising a concrete informee class as an additional specialization of the decision role class, where the role modeled by said informee class has a~~the~~ right to be timely informed of the result of making said decision or choice~~, and~~.

28.   (Amended) The framework of claim 27 further comprising a concrete inspector class as an additional specialization of the decision role class, where the role modeled by said inspector class has a~~the~~ right to veto said decision or choice, but only as it fails to meet established criteria.

29.   (Amended) The framework of claim ~~28~~ 21 further comprising a concrete rule class as a specialization of the data class, where an instance of said rule class may be specified by a concrete decision class for use in (a) making ~~the~~ a decision or choice modeled by said decision class, (b) contingently determining ~~the~~ a dependency of the decision modeled by said decision

class on the result of a decision modeled by some other concrete decision class, or (c) contingently determining the participation and role of persons in the decision or choice modeled by said concrete decision class.

30.   (New) A method for managing one or more work processes comprising:

constructing a computer-based process model for each of said one or more work processes, wherein each said process model includes at least two instances of a first network;

requiring that each of said at least two instances of said first network be comprised of three or more nodes;

requiring that a first node of said three or more nodes model an activity of one of said one or more work processes;

requiring that a second node of said three or more nodes model behaviors of a first role of a first participant in said activity;

requiring that a third node of said three or more nodes model behaviors of a second role of a second participant in said activity; and

using each of said computer-based process models to support at least one of execution, control and improvement of said one or more work processes.

31.   (New) The method of claim 30 further comprising:

modeling each of said one or more work processes as a second network, wherein said at least two instances of said first network comprise the nodes of said second network.

32.   (New) The method of claim 31 further comprising:

requiring that said behaviors of said first role be identically defined for every instance of said first role modeled by an instance of said second node of said three or more nodes in each of said at least two instances of said first network; and

requiring that said behaviors of said second role be identically defined for every instance of said second role modeled by an instance of said third node of said three or more nodes in each of said at least two instances of said first network.

33.   (New) The method of claim 32 further comprising:

requiring that said first node of said three or more nodes be a concrete object class;

using each said computer-based process model to generate one or more project models, wherein each of said one or more project models is an instance of a computer-based process model from which said each of said one or more project models has been generated; and

requiring that each of said one or more project models have an object instance of each concrete object class in said each of said one or more project models, in place of one or more occurrences of said each concrete object class in a computer-based process model from which said each of said one or more project models was generated.

34.   (New) A method for managing one or more work processes comprising:

constructing a computer-based process model of each of said one or more work processes;

requiring that each of said process models includes one or more models of decision situations in one of said one or more work processes, wherein each of said decision situations requires a choice to be made;

requiring that each of said process models model participation of one or more persons in said each of said decision situations, said participation being modeled as at least two decision roles;

requiring that each of said at least two decision roles be associated with said each of said decision situations;

requiring that said each of said at least two decision roles have defined behaviors;

requiring that said defined behaviors of said each of said at least two decision roles be differentiated from said defined behaviors of every other one of said at least two decision roles;

requiring that said defined behaviors be invariant with respect to all of said decision situations; and

using each of said computer-based process models to support at least one of execution, control and improvement of said one or more work processes.

35.   (New) The method of claim 34 further comprising:

requiring that said behaviors of each of said at least two decision roles include at least one of (i) a right of said role with respect to making a choice, (ii) a right of said role with respect to rejecting a choice, (iii) a right of said role with respect to an opportunity to influence a choice and, (iv) a right of said role with respect to being informed of a choice.

36.   (New) The method of claim 34 further comprising:

requiring that one of said at least two decision roles support participation of one or more persons in a decision manager role;

requiring that said one or more persons participating in said decision manager role make a choice anticipated by said decision situation associated with said decision manager role;

requiring that a second of said at least two decision roles support participation of persons in a consultee role in said decision situation associated with said decision manager role;

requiring that each of said persons participating in said consultee role be responsible for providing each of said persons participating in said decision manager role with information relevant to said decision situation;

requiring that said persons participating in said decision manager role give each of said persons participating in said consultee role: (i) a notice that said choice to be made as required by said decision situation is impending, and (ii) sufficient time between providing said notice and making said choice for said persons participating in said consultee role to have provided said information to said persons participating in said decision manager role; and

requiring that, at the option of one or more persons constructing said computer-based process model containing said decision situation with which said any role is associated, there be zero or more persons in any one of said at least two decision roles other than said decision manager role.

37.   (New) The method of claim 36 further comprising:

requiring that a third of said at least two decision roles support participation of persons in an approver role;

requiring that each of said persons participating in said approver role be given a first notice of a result of said choice to be made by said persons participating in said decision manager role; and

requiring that each of said persons participating in said decision manager role refrain from implementing said choice until each of said persons participating in said approver role have given their approval of said choice.

38.   (New) The method of claim 37 further comprising:

requiring that a fourth of said at least two decision roles support participation of persons in an informee role; and

requiring that each of said persons participating in said informee role be given a second notice of said result of said choice made by said persons participating in said decision manager role.

39.   (New) The method of claim 38 further comprising:

requiring that a fifth of said at least two decision roles support participation of persons in an inspector role;

requiring that each of said persons participating in said inspector role be given a third notice of said result of said choice to be made by said persons participating in said decision manager role; and

requiring that each of said persons participating in said decision manager role refrain from implementing said result until said persons participating in said inspector role have accepted said result, wherein said acceptance shall be based exclusively on the conformance of said result to one or more predetermined criteria for said result.

40.   (New) The method of claim 39 further comprising:

requiring that said one or more predetermined criteria include one or more requirements relating to a context of said decision situation, including, (i) in a context requiring production of a document, that a copyright notice and trademark be displayed on said document, and (ii) in a

context requiring design of a product label, that colors specified for various segments of said product label be in accordance with a label specification policy.

41.   (New) The method of claim 34, wherein said decision situations include a first decision situation and further comprises:

requiring, at the option of one or more persons constructing one of said computer-based process model which includes a model of said first decision situation, that a first choice required by said first decision situation be made by specifying that a result of a second decision situation of said decision situations be used as a rule to determine a result of said choice required by said first decision situation.

42.   (New) The method of claim 41 further comprising:

requiring, at the option of one or more persons constructing said one of said computer-based process model which includes said model of said first decision situation, that said first decision situation have a requirement for a result of a third decision situation as a prerequisite to said choice required by said first decision situation;

requiring, at the option of one or more persons constructing said one of said computer-based process model which includes said model of said first decision situation, that said requirement for said result of said third decision situation be contingent on a result of a fourth decision situation, wherein said result of said fourth decision situation is used as a rule to determine said requirement of said first decision situation;

requiring, at the option of one or more persons constructing said one of said computer-based process model which includes said model of said first decision situation, that an association of a decision role with said first decision situation be contingent on a result of a fifth decision situation, wherein said result of said fifth decision situation is used as a rule to determine said association of said decision role with said first decision situation; and

requiring, at the option of one or more persons constructing said one of said computer-based process model which includes said model of said first decision situation, that selection of a person participating in a decision role associated with said first decision situation be contingent on a result of a sixth decision situation, wherein said result of said sixth decision situation is used

as a rule to determine said selection of said person participating in said decision role associated with said first decision situation.

43.   (New) The method of claim 34 further comprising:

requiring that each of said one or more models of decision situations be a concrete decision object class;

using each said computer-based process model to generate one or more project models, wherein each of said one or more project models is an instance of said each said computer-based process model from which said each of said one or more project models was generated; and

requiring that said each of said one or more project models have a decision object instance of each concrete decision object class in said each of said one or more project models, in place of one or more occurrences of said each concrete decision object class in said each said computer-based process model from which said each of said one or more project models has been generated.

44.   (New) The method of claim 43 further comprising:

providing a superclass of said concrete decision object class; and

requiring that all said concrete decision object classes be generated by customizing said superclass.

45.   (New) The method of claim 44 further comprising:

providing an application framework to support construction of said one or more process models;

requiring that said framework include said superclass of said concrete decision object classes;

requiring that said framework include two or more concrete decision role object classes; and

requiring that each of said two or more concrete decision role object classes models behaviors defined for one of said at least two decision roles.

46.   (New) A method for managing one or more work processes comprising:

constructing a computer-based process model of each of said one or more work processes, wherein each said process model includes a network with a concrete object class at each node of said network;

providing a customizable object class encapsulating common attributes and methods required to model a work element of any one of said one or more work processes;

generating said concrete object class at each said node of each said process model by customizing said customizable object class;

generating one or more project models from each said computer-based process model, wherein each of said one or more project models includes a network with an object instance of a concrete object class at each node;

requiring that each said object instance at the node of any of said one or more project models be an instance of said concrete object class at a corresponding node of said process model from which said project model has been generated; and

using said process model and said one or more project models in support of at least one of execution, control and improvement of said one or more work processes.

47.   (New) The method of claim 46 further comprising

using said customizable object class to model a decision situation requiring a choice;

generating two or more concrete decision object classes by customizing said customizable object class; and

requiring that each said concrete decision object class and each object instance of said concrete decision object class, support participation of one or more persons in each said decision situation.

48.   (New) The method of claim 47 further comprising:

requiring that said support of participation of one or more persons in said each said decision situation provide support for participation in two or more differentiated roles.

49.   (New) The method of claim 48 further comprising:

defining behaviors of each of said two or more differentiated roles in a concrete decision role object class; and

providing a decision role object instance of a concrete decision role object class in both said process and said project models to model each instance of a decision role associated with a decision situation.

50.   (New) The method of claim 49 further comprising:

requiring that said behaviors of each of said two or more differentiated roles include at least one of (i) a right of said role with respect to making a choice, (ii) a right of said role with respect to rejecting a choice, (iii) a right of said role with respect to an opportunity to influence a choice, and (iv) a right of said role with respect to being informed of a choice.

51.   (New) The method of claim 49 further comprising:

requiring that incumbents of a first of said two or more differentiated roles make said choice modeled by said associated decision situation;

requiring that incumbents of a second of said two or more differentiated roles at least one of (i) receive a notice that said choice is impending, (ii) have a period of elapsed time between receiving said notice and making said choice, and (iii) have access to said incumbent of said first of said two or more differentiated roles during said period of elapsed time;

requiring that incumbents of a third of said two or more differentiated roles have an opportunity to inspect said result of said choice made by said incumbent of said first of said two or more differentiated roles, after said choice has been made, and to reject said result without reference to predetermined criteria;

requiring that incumbents of a fourth of said two or more differentiated roles receive a notice of said result, after said choice has been made; and

requiring that the number of incumbents in any one of said two or more differentiated roles associated with any said decision situation be established by one or more persons constructing a computer-based process model which contains said any said decision situation, subject to the constraint that there be at least one incumbent of said first of said two or more

differentiated roles and that there be zero or more incumbents of any of said two or more differentiated roles other than said first of said two or more differentiated roles.

52.   (New) The method of claim 51 further comprising:

requiring that incumbents of a fifth of said two or more differentiated roles have an opportunity to inspect said result, after said choice has been made, and to reject said result based exclusively on said result's failure to conform to one or more predetermined criteria for said result.

53.   (New) The method of claim 52 further comprising:

requiring that said one or more predetermined criteria include requirements relating to a context of said associated decision situation, including, (i) in a context requiring production of a document, that a copyright notice and trademark be displayed on said document and that said notice contain a specific text, rendered in a specific font and size, and (ii) in a context requiring design of a product label, that colors specified for various segments of said product label be in accordance with a label specification policy.

54.   (New) The method of claim 47 further comprising

requiring, at the option of one or more persons constructing one of said computer-based process models, that a choice required by any one of said decision situations modeled by said computer-based model be made by specifying that a result of a second of said decision situations be used as a rule to determine a result of said choice required by said any one of said decision situations.

55.   (New) The method of claim 54 further comprising:

requiring, at the option of one or more persons constructing any one of said computer-based process models which includes a model of a first of said decision situations, that said first of said decision situations have a requirement for a result of a second of said decision situations, as a prerequisite to said choice required by said first of said decision situations;

requiring, at the option of one or more persons constructing said any one of said computer-based process models which includes said model of said first of said decision situations, that said requirement for said result of said second of said decision situations be contingent on a result of a third of said decision situations, wherein said result of said third of said decision situations is used as a rule to determine said requirement of said first of said decision situations;

requiring, at the option of one or more persons constructing said any one of said computer-based process models which includes said model of said first of said decision situations, that an association of a decision role with said first of said decision situations, be contingent on a result of a fourth of said decision situations, wherein said result of said fourth of said decision situations is used as a rule to determine said association of said decision role with said first of said decision situations; and

requiring, at the option of one or more persons constructing said any one of said computer-based process models which includes said model of said first of said decision situations, that selection of a person participating in a decision role associated with said first of said decision situations, be contingent on a result of a fifth of said decision situations, wherein said result of said fifth of said decision situations is used as a rule to determine said selection of said person participating in said decision role associated with said first of said decision situations.